

Experience

Software Development Engineer - SimInsights, Inc.

Jun 2020 - Present

Architected and built HyperSkill, a no-code, cross platform 3D simulation software with Unity 3D:

- Designed and developed the State machine system following client request from PwC & AWS, constructed the node & edge graph authoring interface & state action logic tree.
- Improved the dialog simulation system and co-leads the client project of UCLA Health, by implementing the required features and delivered a series of WebGL simulations with 500+ user scale per month.
- Optimized the simulation caching system by refactoring the simulation download pipeline and creating APIs to communicate with MySQL & S3 server.
- Led the migration of HyperSkill to iOS, built the iPad based interaction interface for general 3D and AR mode and submitted to the App store.
- Revamped the VR simulation authoring mode, implemented Lip Sync and hand tracking system for Quest and submitted to the Oculus app store.
- Initiated in developing HyperSkill features including .json error handling, user configuration, assets bundle packaging and TTS/NLP module integration.

XR Developer Intern, Office of the CTO - Autodesk, Inc.

May - Aug 2019

Designed and developed KnowCap, a mixed-reality annotation tool for capturing manufacturing expert knowledge:

- Created the annotation authoring & viewing application with Unity 3D and SteamVR.
- Implemented a wrist-based interaction system with Leap Motion hand tracking system.
- Utilized .json as serialized backend for multi-media annotation formats including gesture, audio recording, 3D curve, etc;

Software Management Intern - Oracle China

Oct - Dec 2017

Deployed Primavera Unifier expenditure module with PGBU Solution director:

- Worked on data warehouse maintenance of Primavera Unifier using MySQL and PL-SQL.
- Used Python & Oracle Cloud Infrastructure APIs to evolve the web service of P6 installation.

Academic Projects

Block Party | Unity Developer | CMU_ETC with Uni-lib office

Sep - Dec 2019

- Architected and built a real-time Kinect RGB-Depth frame processing system and built the Lego color & shape detection system with OpenCV;
- Implemented A-star 2D navigation module and tower-defense gameplay logic in Unity3D.

Scottie Renderer | C++ Graphics Developer | CMU

Sep - Dec 2019

• Architected and built a real-time Kinect RGB-Depth frame processing system and built the Lego color & shape detection system with OpenCV;

Building Virtual Worlds | Unity Programmer | CMU_ETC

Sep - Dec 2018

• Rapidly prototyped, conducted playtesting, and iterated six AR, VR immersive experiences within multidisciplinary teams in two-week cycles.

(412)758-0526
jiminglicmu@gmail.com
www.jimingli.space
linkedin.com/in/jimingli9836/

Education

Carnegie Mellon University

Master of Entertainment Technology School of Computer Science Sep 2018 - May 2020 Pittsburgh, PA

Core curriculum:

Computer graphics,
Java advanced algorithm,
Building virtual worlds,
Web-app development

Beijing University of Post and Telecommunication

Bachelor of Engineering School of Digital Media technology Sep 2014 - May 2018 Beijing, China

Core curriculum:

C++ data structure and algorithm,
Unity 3D game development,
mobile application development

Skills

Programming Languages

 $\label{eq:continuity} $\operatorname{C}^{\#} \cdot \operatorname{Java} \cdot \operatorname{C}^{++} \cdot \operatorname{Python} \cdot \operatorname{Javascript}$$$ $\operatorname{HTML}/\operatorname{CSS}$$$

Engines and Tools

Unity3D · OpenCV · Django Photon MySQL · Git · Xcode · Unreal · PL-SQL CTAT · Figma

Platforms

Oculus Quest · HTC Vive Leap Motion · Oculus Rift Kinect · Meta2 · WebGL Hololens · iOS · Android